

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An electroluminescent device comprising a cathode and an anode and, located therebetween, a light-emitting layer (LEL) and a hole transporting layer between the LEL and the anode, the LEL comprising a phosphorescent guest material, a hole- and electron-transporting host material, and an efficiency-enhancing material, wherein the triplet energy of the phosphorescent guest material is lower than that of the host, wherein the efficiency-enhancing material is present in an amount (1 to 30 wt. % of the LEL) that is sufficient to provide an increase in luminous yield compared to no enhancing material, has an ionization potential lower than that of the host material and, wherein the efficiency enhancing material has a triplet energy level that is higher than that of the phosphorescent guest material.

2. (Canceled)

3. (Original) The device of claim 1 wherein the efficiency-enhancing material is not emissive.

4. (Original) The device of claim 1 wherein the phosphorescent guest material emits green light.

5. (Withdrawn) The device of claim 1 wherein the phosphorescent guest material emits red light.

6. (Original) The device of claim 1 wherein the phosphorescent guest material is an organometallic compound comprising a 5th-row transition metal.

7. (Original) The device of claim 1 wherein the metal is iridium or platinum.

8. (Original) The device of claim 1 wherein the organometallic compound includes a ligand that can be coordinated to a metal through an sp^2 carbon and a heteroatom.

9. (Original) The device of claim 8 wherein the ligand is a phenylpyridine group.

10. (Original) The device of claim 6 wherein the organometallic compound is chosen from tris(2-phenylpyridinato- N,C^2')iridium(III), bis(2-phenylpyridinato- N,C^2')iridium(III)(acetylacetone), bis(2-phenylpyridinato- N,C^2')platinum(II), tris(2-phenylquinolinato- N,C^2')iridium(III), tris(1-phenylisoquinolinato- N,C^2')iridium(III), and tris(3-phenylisoquinolinato- N,C^2')iridium(III) groups.

11. (Canceled)

12. (Original) The device of claim 1 wherein the efficiency-enhancing material is present at a concentration of 3 to 10% by weight of the light-emitting layer.

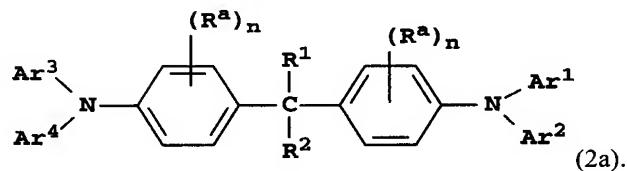
13. (Original) The device of claim 1 wherein the phosphorescent guest material is present at a concentration of 1 to 20% by weight of the light-emitting layer.

14. (Original) The device of claim 1 wherein the phosphorescent guest material is present at a concentration of 3 to 10% by weight of the light-emitting layer.

15. (Original) The device of claim 1 wherein the efficiency-enhancing material is a tertiary aromatic amine.

16. (Original) The device of claim 15 wherein the efficiency-enhancing material includes two or more triarylamine groups linked together by a linking group.

17. (Withdrawn) The device of claim 1 wherein the efficiency-enhancing material is a compound represented by Formula (2a),



wherein:

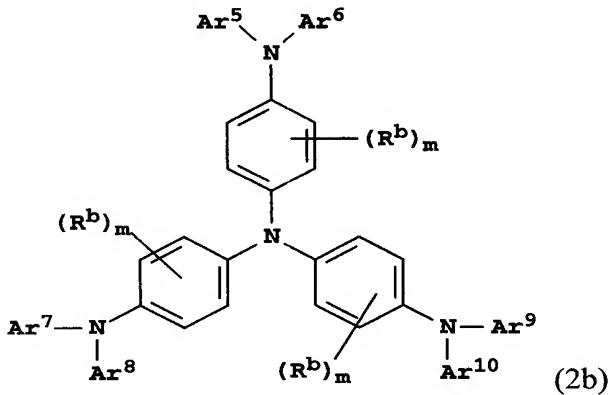
R^1 and R^2 represent hydrogen or substituents, provided R^1 and R^2 can join to form a ring;

Ar^1 - Ar^4 represent independently selected aromatic groups;

each R^a independently represents hydrogen or an independently selected substituent; and

each n is independently selected as 0-4.

18. (Original) The device of claim 1 wherein the efficiency-enhancing material is a compound represented by Formula (2b),



wherein:

Ar^5 - Ar^{10} independently represent aromatic groups;

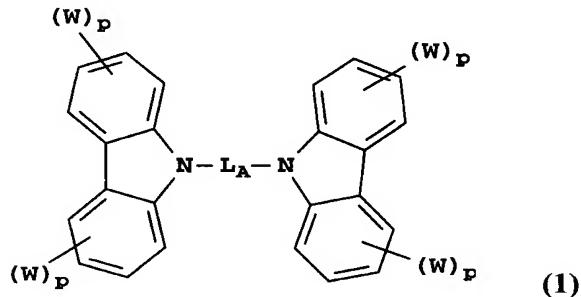
each R^b independently represents an independently selected substituent;
and
each m is independently selected as 0-4.

19. (Original) The device of claim 1 wherein the efficiency-enhancing material is chosen from:

1,1-Bis(4-di-*p*-tolylaminophenyl)cyclohexane;
1,1-Bis(4-di-*p*-tolylaminophenyl)-4-phenylcyclohexane;
1,1-Bis(4-di-*p*-tolylaminophenyl)-4-methylcyclohexane;
1,1-Bis(4-di-*p*-tolylaminophenyl)-3-phenylpropane;
4,4',4"-Tris(diphenylamino)triphenylamine;
4,4',4"-Tris[(3-methylphenyl)phenylamino]triphenylamine;
Bis[4-(N,N-diethylamino)-2-methylphenyl](4-methylphenyl)methane;
Bis[4-(N,N-diethylamino)-2-methylphenyl](4-methylphenyl)ethane;
4-(4-Diethylaminophenyl)triphenylmethane; and
4,4'-Bis(4-diethylaminophenyl)diphenylmethane.

20. (Original) The device of claim 1 wherein the host material comprises a compound selected from arylamine, triazole, indole, and carbazole group containing compounds.

21. (Original) The device of claim 1 wherein the host material comprises a carbazole represented by Formula 1:



wherein:

W independently represents hydrogen or an independently selected substituent, p independently is 0-4, and L_A represents a linking group.

22. (Original) The device of claim 1 wherein the host material comprises one selected from 4,4'-N,N'-dicarbazole-biphenyl, 4,4'-N,N'-dicarbazole-2,2'-dimethyl-biphenyl, 1,3-bis(N,N'-dicarbazole)benzene, and poly(N-vinylcarbazole) group containing compounds.

23. (Withdrawn) The device of claim 1 that comprises two or more host materials.

24. (Original) The device of claim 1 including a means for emitting white light.

25. (Original) The device of claim 24 including two or more compounds capable of emitting complimentary colors.

26. (Original) The device of claim 24 including a compound capable of emitting white light.

27. (Original) The device of claim 24 including a filtering means.

28. (Original) A display comprising the electroluminescent device of claim 1.

29. (Original) An area lighting device comprising the electroluminescent device of claim 1.

30. (Original) A process for emitting light comprising applying a potential across the device of claim 1.